UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,487	11/21/2001	Hans-Georg Baumgarten	1454.1086/RAG	2500

21171   7590   11/04/2003

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EXAMINER
SINGH, DALIP K

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/913,487	BAUMGARTEN ET AL.
	Examiner	**Art Unit**	
	Dalip K Singh	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 December 2001</u> .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-29</u> is/are pending in the application.

    4a) Of the above claim(s) <u>1-15</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>16-29</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☒ None of:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities: On page 5, in paragraph 0027, in lines 11-13, the compression means and compression, both refer to element 105 which is confusing. It is clear compression means element 105 is doing the compression process but the compression process itself is again listed as element 105..

Appropriate correction is required.

Claim Objections

2.   Claim 25 is objected to because of the following informalities: It seems to end without a period after --information--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The language, --within a predefined tolerance--, is not present or not supported by the specification. For the purpose of examination of the instant application, it will be treated as if there is no predefined tolerance.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claim(s) 16-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,115,496 to Nguyen et al. in view of U.S. Patent No. 4,803,477 to Miyatake et al.

a.   Regarding claim 16, Nguyen et al. **discloses** determining to retrieve the mapping object (...decompression is initiated by fetching compressed data...from memory locations...col. 21, lines 25-38) when a digital image is modified by a predefined process to at least one of transform and convert the digital image (...uncompressed image data...is preprocessed...col. 7, lines 55-67), the predefined process having at least one parameter which determines a mapping of the mapping object (...the exemplary color variant compressed data blocks use an...6-bit color index...col. 15, lines 57-67). Nguyen et al. **does not disclose** determining an index by reference to the at least one parameter; and referencing the mapping object by reference to the index. Miyatake et al. **discloses** a management system of graphic data using an index table where a graphic data management system carries out the search referring to, among other tables, index table which includes a pointer which are addresses of the graphic data in the memory (Abstract; col. 1, lines 57-67; col. 2, lines 1-30). Therefore, it would have been obvious to a person of ordinary skill in the art at the time invention was made to modify Nguyen et al. with the feature "index mechanism which can search graphic data at high speed" as taught by Miyatake et al. **because** indexing mechanism conserve memory space.

b.   Regarding claim 17, Nguyen et al. **discloses** digital image data being modified by a plurality of processes (...partitioning...identifying each partitioned block as being color variant, color invariant, or clear...col. 3, lines 13-24).

c.   Regarding claim 18, Nguyen et al. as modified by Miyatake et al. **implicitly discloses** a uniquely defined index table structure for searching graphic data at high speed (col. 1, lines 56-65).

d.   Regarding claim(s) 19 and 20, Nguyen et al. as modified by Miyatake et al. **discloses** both an index stored with an entry address (...the CELL table 50-6 is a list consisting of pairs of graphic data storing destination address and a...pointer...col. 5,

lines 25-27) as well accessing the index (...the SEG table 20-1 can be directly accessed...col. 5, lines 27-29) for the mapping object in the memory.

e.   Regarding claim 21, Nguyen et al. **discloses** both compressing and storage of image data (col. 3, lines 25-37).

f.   Regarding claim 22, Nguyen et al. as modified by Miyatake et al. **discloses** determination of an index from at least one parameter of a process (...the exemplary color variant compressed data blocks use an...6-bit color index...col. 15, lines 57-67); determining of the mapping object by reference to the index and accessing the mapping object (Abstract; col. 1, lines 57-67; col. 2, lines 1-30); and determining and accessing a new mapping object if the mapping object cannot be determined with respect to the index (...graphic data can be searched at a high speed...and also added...without enlarging the memory space...col. 2, lines 1-6).

g.   Regarding claim 23, Nguyen et al. as modified by Miyatake et al. **discloses** plurality of processes used for one of determining indices (Fig. 4, 5A, 5B, 9 and 12).

h.   Regarding claims 30-33, Aleksic et al. **teaches** the two sub-caches can be unequal or equal in size (...Cache 114 is split into two portions ...cache portions 114A and 114B are equally divided ...however...other divisions of cache can be utilized ...col. 4, lines 48-53).

i.   Regarding claim 34, Aleksic et al. teaches the two sub-caches are a first sub-cache (the first cache portion 114A) and a second sub-cache (the second cache portion 114B); and further comprising maintaining the first sub-cache; and maintaining the second sub-cache independently of maintaining the first sub-cache (...first cache portion 114A is accessed by cache controller 137...the cache controller 138 access the second cache portion 114B...col. 4, lines 53-60).

j.   Regarding claim 24, Nguyen et al. as modified by Miyatake et al. **discloses** accessing mapping object if the at least one parameter corresponds to at least one stored parameter of the mapping object (...a process 250 accesses the index table of Fig. 5A when the cell numbers are provided and extracts the associated segment numbers.. col. 6, lines 41-58).

k.   Regarding claim 25, Nguyen et al. **implicitly discloses** mapping object including information.

l.   Regarding claim 26, Nguyen et al. **implicitly discloses** mapping object including another digital image.

m. Regarding claim 27, Nguyen et al. **discloses** wherein at least one parameter is a specific variable for influencing image data of the predefined digital image (...(...the exemplary color variant compressed data blocks use an...6-bit color index...col. 15, lines 57-67).

n.   Regarding claim 28, it is similar in scope to claim 16 above and is rejected under the same rationale.

o.   Regarding claim 29, it is similar in scope to claim 22 above and is rejected under the same rationale.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Dalip K. Singh** whose telephone number is **(703) 305-3895**. The examiner can normally be reached on Mon-Thu (8:00AM-6: 30PM) Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella**, can be reached at **(703) 308-6829**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

dks

November 1, 2003
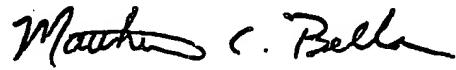
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SUPERVISORY PATENT EXAMINER
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